

Message Text

UNCLASSIFIED

PAGE 01 TOKYO 14190 01 OF 03 061119Z

10

ACTION L-03

INFO OCT-01 EUR-12 EA-09 ISO-00 H-02 OES-05 AID-05 CIAE-00

COME-00 EB-07 FRB-01 INR-07 NSAE-00 USIA-15 TRSE-00

XMB-04 OPIC-06 SP-02 CIEP-02 LAB-04 SIL-01 OMB-01

FPC-01 EPA-04 CEQ-01 /093 W
----- 004380

P R 060920Z OCT 75

FM AMEMBASSY TOKYO

TO SECSTATE WASHDC PRIORITY 3831

INFO AMEMBASSY LONDON

AMEMBASSY BONN

UNCLAS SECTION 1 OF 3 TOKYO 14190

E. O. 11652: N/A

TAGS: TECH, JA

SUBJ: ELECTRIC CARS

REFS: A) STATE 224733, B) STATE 236981

1. IN RESPONSE TO REQUEST CONTAINED IN REFTEL A, AGENCY FOR INDUSTRIAL SCIENCE AND TECHNOLOGY OF MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY (AIST/MITI) HAS PROVIDED FOLLOWING INFORMATION ON ELECTRIC CAR R&D IN JAPAN. GOJ HAS ALSO PROVIDED BROCHURE CONTAINING DETAILED STRUCTURAL AND PERFORMANCE CHARACTERISTICS OF FIVE EXPERIMENTAL ELECTRIC VEHICLES CURRENTLY UNDER DEVELOPMENT OF GOJ THROUGH QUOTE LARGE-SCALE INDUSTRIAL TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM. UNQUOTE THIS BROCHURE AIRPOUCHED TO STATE/OES ON OCTOBER 6. ADDITIONALLY, PRIVATE INDUSTRY ALSO CURRENTLY WORKING ON SIX EXPERIMENTAL ELECTRIC VEHICLES INDEPENDENTLY FROM GOJ. STRUCTURAL AND PERFORMANCE CHARACTERISTICS ON THESE PARALLEL BUT SEPARATE R&D EFFORTS CITED THIS TELEGRAM, PARA 3.

2. AIST/MITI OFFICIALS PROVIDED FOLLOWING ANSWERS TO SPECIFIC QUESTIONS RAISED REFTEL A.

1. HOW EXTENSIVE AN EFFORT CURRENTLY EXISTS ON RESEARCH, DEVELOPMENT
UNCLASSIFIED

UNCLASSIFIED

PAGE 02 TOKYO 14190 01 OF 03 061119Z

LOPMENT AND DEMONSTRATION OF ELECTRIC AND HYBRID VEHICLES IN YOUR

COUNTRY? PLEASE INDICATE FUNDING LEVELS, IF POSSIBLE.

(A) RESEARCH AND DEVELOPMENT ON ELECTRIC CARS IN JAPAN IS A PROJECT UNDER THE LARGE-SCALE INDUSTRIAL TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM (USUALLY REFERRED TO AS LARGE-SCALE PROJECTS) COVERING A PERIOD FROM JAPAN FY 1971 TO 1976 (TN: APRIL, 1971 THROUGH MARCH, 1977) INVOLVING A RESEARCH AND DEVELOPMENT EXPENDITURE TOTALING APPROXIMATELY YEN 5 BILLION (TN: ABOUT \$16.7 MILLION AT YEN 300/\$1 EXCHANGE RATE). THE PROJECT FOCUSES ON RESEARCH AND DEVELOPMENT ON HIGH-PERFORMANCE ELECTRIC CARS FOR URBAN USES. AS FOR DETAILS OF THE PROJECT, PLEASE REFER TO THE ENCLOSED MATERIAL, DEVELOPMENT OF ELECTRIC VEHICLES IN JAPAN (EMBASSY COMMENT: AIR POUCH TO STATE/OES 10/6/75).

2. TO WHAT EXTENT ARE ELECTRIC OR HYBRID VEHICLES CURRENTLY BEING USED IN YOUR COUNTRY AND WHAT IS THE ANTICIPATED LEVEL OF USE OVER THE NEXT 5 AND 10-YEAR PERIODS?

(A) ABOUT 500 ELECTRIC VEHICLES ARE NOW BEING USED IN JAPAN FOR OPERATIONS BY ELECTRIC POWER COMPANIES, THE NIPPON TELEPHONE AND TELEGRAPH PUBLIC CORPORATION, LOCAL GOVERNMENTS, ETC., AND OPERATIONS BY PRIVATE ENTERPRISES AND STORES INCLUDING MILK DELIVERY, AND BUSES. IF VEHICLES FOR OFF-ROAD USES ARE INCLUDED, THE TOTAL NUMBER OF ELECTRIC VEHICLES CURRENTLY IN USE IS ABOUT 2,000. FORECASTING THE DEMAND FOR ELECTRIC CARS IN THE NEXT 5 TO 10 YEARS IS VERY DIFFICULT CONSIDERING THE OUTPUT, COST, VEHICLE PERFORMANCE, POST-DELIVERY SERVICES, ETC. HOWEVER, A FAIRLY LARGE NUMBER OF ELECTRIC VEHICLES WILL BE IN POTENTIAL DEMAND AT LEAST FOR RELATIVELY SHORT-DISTANCE TRANSPORT PURPOSES SUCH AS DELIVERY AND BUSINESS OPERATIONS.

3. HOW CAN INTERNATIONAL COOPERATION ON THE DEVELOPMENT OF ELECTRIC OR HYBRID VEHICLES BE MOST EFFICIENTLY STIMULATED?

(A) IF RESEARCH AND DEVELOPMENT ON ELECTRIC CARS IS TO BE EFFECTIVE, IT WOULD BE NECESSARY TO PROMOTE INFORMATION EXCHANGES, ETC. ON A CASE-BY-CASE BASIS AMONG COUNTRIES. STUDY IS IN PROGRESS NOW FOR RESEARCH COOPERATION, CENTERING AROUND INFORMATION EXCHANGES, ON AN "ENERGY STORAGE SYSTEM" RELATING TO ELECTRIC CARS UNDER THE JAPAN-US ENERGY TECHNOLOGY RESEARCH COOPERATION AGREEMENT. MEANWHILE, JAPAN HAS MADE AVAILABLE TO OTHER COUNTRIES SOME OF THE RESULTS OF ITS RESEARCH AND DEVELOPMENT ON ELECTRIC VEHICLES AT SYMPOSIUMS, ETC. HELD ABROAD.

4. WHAT, IN YOUR OPINION, WILL BE THE STATE-OF-THE-ART IN ELECTRIC AND HYBRID VEHICLES BY 1980?

UNCLASSIFIED

UNCLASSIFIED

PAGE 03 TOKYO 14190 01 OF 03 061119Z

(A) IT IS EXPECTED THAT TECHNOLOGY RELATED TO ELECTRIC VEHICLES WILL BECOME MORE ADVANCED THAN AT PRESENT AND ELECTRIC VEHICLES WILL BE GRADUALLY IN WIDER URBAN USE FROM NOW ON AND IN THE 1980'S. (THIS IS RELATED TO QUESTIONS 2 AND 10).

5. IN ADDITION TO BATTERY RESEARCH, WHERE SHOULD AN R&D PROGRAM ON ELECTRIC AND HYBRID VEHICLES FOCUS ITS EFFORTS?

(A) BATTERIES ARE THE FOCUS OF RESEARCH AND DEVELOPMENT ON ELECTRIC CARS. OTHER POINTS CONSIDERED IMPORTANT FOR R&D EFFORT

WILL BE: (1) RESEARCH AND DEVELOPMENT ON THE ELECTRIC MOTOR AND CONTROLS FROM THE STANDPOINT OF PROMOTION OF ENERGY UTILIZATION AND EFFICIENCY. (2) RESEARCH AND DEVELOPMENT ON MECHANISMS AND MATERIALS OF VEHICLE BODY FOR MORE EFFICIENT OPERATION OF ELECTRIC VEHICLES. (3) RESEARCH AND DEVELOPMENT ON THE BATTERY CHARGING SYSTEM AND THE UTILIZATION SYSTEM FOR WIDER UTILIZATION OF ELECTRIC VEHICLES

6. ARE THERE OTHER VEHICLE TECHNOLOGIES THAT OFFER COMPARABLE REDUCTION IN PETROLEUM CONSUMPTION AND REDUCTION OF ENVIRONMENTAL IMPACT TO THAT OF ELECTRIC AND HYBRID VEHICLES?

(A) RESEARCH AND DEVELOPMENT ARE IN PROGRESS ON VARIOUS TECHNOLOGIES INCLUDING NEW TYPES OF ENGINES. THEY ARE, HOWEVER, IN THE PHASE OF BASIC STUDIES AND PROSPECTS FOR THEIR PRACTICAL APPLICATIONS ARE UNCERTAIN. UNDER THE CIRCUMSTANCES, ELECTRIC CARS, AS USED FOR URBAN TRANSPORTATION, ARE CONSIDERED BEST IF WE ARE TO ATTAIN THE DEVELOPMENT OF POLLUTION-FREE VEHICLES AND TO MEET DIVERSIFIED ENERGY USES IN THE FUTURE.

7. WHAT ARE THE PERFORMANCE CHARACTERISTICS OF CURRENT TECHNOLOGY ELECTRIC VEHICLES? WHAT IMPROVEMENTS IN LEAD-ACID BATTERY TECHNOLOGY DO YOU FORESEE IN THE NEXT 5 AND 10-YEAR PERIODS? WHAT ARE THE IMPLICATIONS OF THESE IMPROVEMENTS FOR THE PERFORMANCE CHARACTERISTICS AND PURCHASE AND LIFE CYCLE COSTS OF ELECTRIC VEHICLES?

(A) THE RESULTS OF TESTS CONDUCTED FOR THE FIRST TEST VEHICLES UNDER THE LARGE-SCALE RESEARCH AND DEVELOPMENT PROJECT ARE SHOWN ON PAGE FIVE OF APPENDIX 1 (EMBASSY COMMENT: AIR POUCHED TO STATE/OES ON 10/6/75). AT A REGULAR CONTINUOUS RUN OF 40 KM/H, THE TEST VEHICLE ACHIEVED A RUNNING DISTANCE OF 150-200 KM PER BATTERY CHARGE. SOME OF THE PERFORMANCE CHARACTERISTICS OF ELECTRIC VEHICLES DEVELOPED INDEPENDENTLY BY PRIVATE INDUSTRY, VEHICLES REMODELED FROM GASOLINE-POWERED VEHICLES, ARE SHOWN IN PARA. 3. IN IMPROVING THE LEAD BATTERY FOR VEHICLE USE, IMPORTANT PROBLEMS ARE THE IMPROVEMENT OF THE ENERGY DENSITY, PROMOTION OF LIFE CYCLE, AND REDUCTION

UNCLASSIFIED

PAGE 04 TOKYO 14190 01 OF 03 061119Z

OF THE PRODUCTION COST. FOR WIDER UTILIZATION OF ELECTRIC VEHICLES, THE FOLLOWING TECHNICAL TARGETS MUST BE ACHIEVED: (1) ENERGY DENSITY: 40-50 WH/KG, (2) LIFE CYCLE: 1000-500 CYCLE (FIVE-HOUR RATE DISCHARGE FOR BOTH CYCLES). ALTHOUGH NO SUFFICIENT DATA ARE AVAILABLE FOR CLARIFYING THE RELATIONSHIP BETWEEN IMPROVED CHARACTERISTICS OF THE LEAD BATTERY AND THE PRICES OF ELECTRIC VEHICLES, AN ESTIMATE FOR THE ENERGY DENSITY AND THE BATTERY COST, MAY BE OF SOME USE. (EMBASSY COMMENT: GRAPHS SHOWING ESTIMATED TRADE-OFFS FOR BATTERY PRICE/ENERGY DENSITY AND BATTERY LIFE/ENERGY DENSITY POUCHED TO STATE/OES, 10/6/75).

UNCLASSIFIED

NNN

UNCLASSIFIED

PAGE 01 TOKYO 14190 02 OF 03 061133Z

17

ACTION L-03

INFO OCT-01 EUR-12 EA-09 ISO-00 OES-05 H-02 FPC-01 AID-05

CIAE-00 COME-00 EB-07 FRB-01 INR-07 NSAE-00 USIA-15

TRSE-00 XMB-04 OPIC-06 SP-02 CIEP-02 LAB-04 SIL-01

OMB-01 EPA-04 CEQ-01 /093 W
----- 004463

P R 060920Z OCT 75

FM AMEMBASSY TOKYO

TO SECSTATE WASHDC PRIORITY 3832

INFO AMEMBASSY LONDON

AMEMBASSY BONN

UNCLAS SECTION 2 OF 3 TOKYO 14190

8. IN YOUR OPINION, WHAT OTHER BATTERIES SHOW PROMISE OF FUTURE USE IN ELECTRIC VEHICLES, AND ON WHAT TIME-TABLES? WHAT PERFORMANCE CHARACTERISTICS AND COSTS WILL BE ASSOCIATED WITH THE USE OF THESE OTHER BATTERIES?

(A) RESEARCH AND DEVELOPMENT ON TYPES OF BATTERIES OTHER THAN THE LEAD BATTERY ARE IN PROGRESS UNDER THE LARGE-SCALE RESEARCH AND DEVELOPMENT PROJECT. IN JAPAN FY 1976 (TN: BEGINNING APRIL, 1976), THESE BATTERIES WILL BE SUBJECTED TO TESTS AND EVALUATION (SOME WILL BE INSTALLED ON TEST VEHICLES). PERFORMANCE CHARACTERISTICS GOALS FOR NEW BATTERIES ARE AS SHOWN ON PAGE 8 OF ATTACHED DATA 1. (EMBASSY COMMENT: AIRPOUCHED TO STATE/OES ON 10/6/75) IT IS DIFFICULT AT THIS TIME TO FORECAST WHEN THESE NEW BATTERIES WILL BE PUT TO USE AND HOW MUCH THE PRODUCTION COST WILL BE AT THAT TIME.

9. WHAT PROBLEMS OR CONSTRAINTS MIGHT ARISE IN LARGE SCALE MANUFACTURE OF ELECTRIC CARS WITH RESPECT TO PRODUCTION EQUIPMENT AND MANPOWER SKILLS? WHAT PROBLEMS MIGHT BE ANTICIPATED BY ELECTRIC VEHICLE MANUFACTURERS IN THE AREAS OF MATERIALS OR CAPITAL AVAILABILITY?

(A) FOR MASS PRODUCTION OF ELECTRIC CARS THE VEHICLE BODY ITSELF WILL NOT POSE ANY SERIOUS PROBLEM. PRODUCTION FACILITIES IN PREVIOUS USE CAN BE USED FOR MASS PRODUCTION. HOWEVER, WHEN THE PLASTIC BODY IS ADOPTED IN ORDER TO ATTAIN REDUCTION OF WEIGHT OF VEH-

UNCLASSIFIED

UNCLASSIFIED

PAGE 02 TOKYO 14190 02 OF 03 061133Z

ICLES, IT WILL BE NECESSARY TO DEVELOP TECHNOLOGY FOR LARGE-SCALE PRODUCTION OF SUCH VEHICLE BODY MATERIALS. NEW INVESTMENT IN FACILITIES WILL BE REQUIRED FOR MASS PRODUCTION OF BATTERIES, MOTORS, CONTROLS, ECT. SUFFICIENT CONSIDERATION MUST ALSO BE GIVEN MEASURES TO PROTECT THE LABOR ENVIRONMENT IN PRODUCING BATTERIES. IT WILL ALSO BE NECESSARY TO DEVELOP TECHNOLOGIES FOR ENVIRONMENTALLY ACCEPTABLE RECOVERY AND REUSE OF WASTE BATTERIES, FROM THE STANDPOINT OF EFFECTIVE USE OF RESOURCES AND ENVIRONMENTAL PROTECTION.

10. WHAT INSTITUTIONAL IMPEDIMENTS (I.E. FACTORS OF NON-TECHNICAL NATURE) DO YOU SEE TO THE WIDESPREAD INTRODUCTION OF ELECTRIC VEHICLES?

(A) ELECTRIC VEHICLES ARE POLLUTION-FREE VEHICLES. IT WILL BE NECESSARY, THEREFORE, TO STRIVE FOR THEIR PRACTICAL USE. HOWEVER, IT WILL BE NECESSARY FOR THE GOVERNMENT TO TAKE ADEQUATE MEASURES FOR THE PROMOTION OF THEIR UTILIZATION BECAUSE OBSTACLES ARE ANTICIPATED IN THEIR FULL-SCALE INTRODUCTION DUE TO THE HIGH COST, WHEN COMPARED TO GASOLINE-POWERED VEHICLES, AND THE LAG IN IMPROVING SYSTEMS NECESSARY FOR UTILIZATION INCLUDING THE CHARGING SYSTEM AND POST-DELIVERY SERVICES.

3. STRUCTURAL AND PERFORMANCE CHARACTERISTICS ON EXPERIMENTAL ELECTRIC VEHICLES BEING DEVELOPED BY JAPANESE PRIVATE INDUSTRY (SEPARATE FROM GOJ-INDUSTRY R&D EFFORTS UNDER QUOTE LARGE-SCALE INDUSTRIAL TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM UNQUOTE) PROVIDED BY AIST/MITI AND REPRODUCED HERE. FOLLOWING STATISTICS IN PARAS 4 THRU 9 KEYED TO SPECIFICATIONS STATED BELOW:

1. NAME OF VEHICLE
2. MANUFACTURER
- 3-1. TYPE OF VEHICLE
- 3-2. OVERALL LENGTH X OVERALL WIDTH X OVERALL HEIGHT
- 3-3. PASSENGERS, PAYLOAD
- 3-4. WEIGHT OF VEHICLE
- 4-1. MAXIMUM SPEED
- 4-2. CRUISING RANGE PER CHARGE OF BATTERY
- 4-3. ACCELERATION
- 4-4. SLOPE RUNNING POWER
- 5-1. TYPE OF BATTERY
- 5-2. CAPACITY OF BATTERY
- 5-3. WIEGHT OF BATTERY
- 6-1. TYPE OF MOTOR
- 6-2. OUTPUT OF MOTOR

UNCLASSIFIED

UNCLASSIFIED

PAGE 03 TOKYO 14190 02 OF 03 061133Z

- 6-3. WEIGHT OF MOTOR
- 7-1. CONTROL DEVICE
- 7-2. BRAKE SYSTEM
- 7-3. CHARGING DEVICE

4.

1. L38V-REMODELED 2.
2. DAIHATSU KOGYO
- 3-1. FELLOW MAX VAN-IMPROVED
 - 2. 2,995 X 1,295 X 1,330 MM
 - 3. 2 PLUS 100 KG
 - 4. 740 KG
- 4-1. 60 KM/H
 - 2. 120 KM
 - 3. 0 - 200 M: 22 SEC.
 - 4. 27 PERCENT
- 5-1. LEAD-ACID
 - 2. 60V - 250 AH
 - 3. ---
- 6-1. DC SERIES
 - 2. 5.3 KW/R,300 RPM
 - 3. ---
- 7-1. THYRISTER CHOPPER
 - 2. ---
 - 3. ---

5.

1. TOYOTA COMMUTER
 2. TOYOTA MOTOR CO.
 - 3-1. NEWLY DESIGNED
 - 2. 1,750 X 1,300 X 1,350
 - 3. 2
 - 4. 350 KG
 - 4-1. 40 KM/H
 - 2. 50 KM
 - 3. ---
 - 4. 15 PERCENT
 - 5-1. LEAD-ACID
 - 2. 48V - 100 AH
 - 3. 4 X 128 KG
 - 6-1. DC SERIES
- UNCLASSIFIED

UNCLASSIFIED

PAGE 04 TOKYO 14190 02 OF 03 061133Z

- 2. 4.5KW/4,000 RPM
- 3. ---
- 7-1. THYRISTER CHOPPER
 - 2. NO GENERATIVE BRAKE
 - 3. FIXED, CHARGING TIME: 6 H

UNCLASSIFIED

NNN

UNCLASSIFIED

PAGE 01 TOKYO 14190 03 OF 03 061137Z

17

ACTION L-03

INFO OCT-01 EUR-12 EA-09 ISO-00 OES-05 H-02 FPC-01 AID-05

CIAE-00 COME-00 EB-07 FRB-01 INR-07 NSAE-00 USIA-15

TRSE-00 XMB-04 OPIC-06 SP-02 CIEP-02 LAB-04 SIL-01

OMB-01 EPA-04 CEQ-01 /093 W
----- 004455

P R 060920Z OCT 75

FM AMEMBASSY TOKYO

TO SECSTATE WASHDC PRIORITY 3833

INFO AMEMBASSY LONDON

AMEMBASSY BONN

UNCLAS SECTION 3 OF 3 TOKYO 14190

6.

1. CITY CAR
2. NISSAN MOTOR CO.
- 3-1. NEW TYPE CAR
 - 2. 2,416 X 1,350 X 1,397
 - 3. 2
 - 4. 660 KG
- 4-1. 60 KM/H
 - 2. 90 KM
 - 3. 0 - 200 M: 20 SEC
 - 4. 15 PERCENT
- 5-1. LEAD-ACID
 - 2. 120V - 60 AH
 - 3. 10 X 15 KG
- 6-1. DC SERIES
 - 2. 5 KW/6,000 RPM
 - 3. 39 KG
- 7-1. THYRISTER CHOPPER
 - 2. REGENERATIVE BRAKE
 - 3. FIXED. CHARGING TIME: 5 H

7.

UNCLASSIFIED

UNCLASSIFIED

PAGE 02 TOKYO 14190 03 OF 03 061137Z

1. MATSUDA BPA IMPROVED
2. TOYO KOGYO
- 3-1. FAMILIA VAN IMPROVED
 - 2. 3,700 X 1,480 X 1,365
 - 3. 2 PLUS 200 KG
 - 4. 1,070 KG
- 4-1. 70 KM/H
 - 2. 70 KM
 - 3. ---
 - 4. 17 PERCENT
- 5-1. LEAD-ACID
 - 2. 12V - 130 AH
 - 3. 8 X 40 KG
- 6-1. DC SERIES
 - 2. 8.1 KW/4,640 RPM
 - 3. 80 KG
- 7-1. SERIES-PARALLEL SWITCH
 - 2. NO REGENERATIVE BRAKE
 - 3. FIXED. CHARGING TIME: 12 H

8.
 1. EXPERIMENTAL ELECTRIC CAR NO. 2
 2. YUASA BATTERY
 - 3-1. DAIHATSU COMPANO VAN REMODELED
 - 2. 3,795 X 1,425 X 1,440
 - 3. 2 PLUS 200 KG
 - 4. ---
 - 4-1. 69 KM/H
 - 2. 120 KM (40 KM/H)
 - 3. 0 - 200 M: 22 SEC
 - 4. 19 PERCENT
 - 5-1. LEAD-ACID
 - 2. 120 V - 150 AH
 - 3. 10 X 39.5 KG
 - 6-1. DC SERIES
 - 2. 4.6 KW/3,060 RPM
 - 3. 66 KG
 - 7-1. THYRISTER CHOPPER
 - 2. NO REGENERATIVE BRAKE
 - 3. FIXED.

UNCLASSIFIED

UNCLASSIFIED

PAGE 03 TOKYO 14190 03 OF 03 061137Z

9.
 1. MITSUBISHI ME 460 (KOBE CITY TRANSPORT BUREAU)
 2. MITSUBISHI
 - 3-1. ---
 - 2. 9,380 X 2,490 X 3,060
 - 3. 70
 - 4. 10,350 KG

4-1. 60 KM/H

-2. 170 KM (40 KM/H)

-3. 0 - 40 KM: 15 SEC

-4. 0.150

5-1. ---

-2. ---

-3. ---

6-1. DC SERIES

-2. 72 KW/2,100 RPM

-3. ---

7-1. THYRISTER CHOPPER

-2. REGENERATIVE BRAKE

-3. ---

SHOESMITH

UNCLASSIFIED

NNN

Message Attributes

Automatic Decaptioning: X
Capture Date: 01 JAN 1994
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: RESEARCH, ELECTRIC VEHICLES, UPPER HOUSE, US CONGRESSIONAL HEARINGS
Control Number: n/a
Copy: SINGLE
Draft Date: 06 OCT 1975
Decaption Date: 01 JAN 1960
Decaption Note:
Disposition Action: n/a
Disposition Approved on Date:
Disposition Authority: n/a
Disposition Case Number: n/a
Disposition Comment:
Disposition Date: 01 JAN 1960
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1975TOKYO14190
Document Source: CORE
Document Unique ID: 00
Drafter: n/a
Enclosure: n/a
Executive Order: N/A
Errors: N/A
Film Number: D750346-0167
From: TOKYO
Handling Restrictions: n/a
Image Path:
ISecure: 1
Legacy Key: link1975/newtext/t19751080/aaaactue.tel
Line Count: 453
Locator: TEXT ON-LINE, ON MICROFILM
Office: ACTION L
Original Classification: UNCLASSIFIED
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 9
Previous Channel Indicators: n/a
Previous Classification: n/a
Previous Handling Restrictions: n/a
Reference: 75 STATE 224733, 75 STATE 236981
Review Action: RELEASED, APPROVED
Review Authority: SmithRJ
Review Comment: n/a
Review Content Flags:
Review Date: 11 SEP 2003
Review Event:
Review Exemptions: n/a
Review History: RELEASED <11 SEP 2003 by MaustMC>; APPROVED <19 FEB 2004 by SmithRJ>
Review Markings:

Margaret P. Grafeld
Declassified/Released
US Department of State
EO Systematic Review
06 JUL 2006

Review Media Identifier:
Review Referrals: n/a
Review Release Date: n/a
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
Secure: OPEN
Status: NATIVE
Subject: ELECTRIC CARS
TAGS: TECH, JA, US
To: STATE
Type: TE
Markings: Margaret P. Grafeld Declassified/Released US Department of State EO Systematic Review 06 JUL 2006